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KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,  
MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL,  
PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL,  
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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: GELATINE-BASED MATERIALS AS SWABS

(57) Abstract: A swab comprising gelatine or collagen has been found to have a remarkably high recovery of microorganisms. Furthermore, the samples, such as microorganisms, spores, nucleotides and other biologically or biochemically relevant compounds can be fully recovered from the collagen-or gelatine-comprising swab. The invention thus provides a method and swab which has a high recovery of a target from a sample and furthermore a second high recovery when transferring from the swab to a medium for analysis.

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK 03/00855

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N1/02 A61B10/00 C08J9/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N A61B C08J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y Y	GB 697 603 A (SYDNEY ARTHUR GLADSTONE) 23 September 1953 (1953-09-23)  page 1, line 35 - line 61 page 2, line 8 - line 13	1-4, 30, 57 6, 7, 10 15-20, 22-27, 31-36
Y	US 2001/041913 A1 (ASHBY MARK ET AL) 15 November 2001 (2001-11-15) paragraph '0043! paragraph '0049! paragraph '0060!	6, 7, 10, 22, 23, 26
A	EP 0 156 649 A (MINNESOTA MINING & MFG) 2 October 1985 (1985-10-02) page 4, line 23 - line 28; figure 2  -/-	21, 28, 29

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&amp;\* document member of the same patent family

Date of the actual completion of the international search

1 September 2004

Date of mailing of the international search report

08.10.2004

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# INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 98/43092 A (BAYSTATE MEDICAL CENTER) 1 October 1998 (1998-10-01)  claims 23,24	15-20, 22-27, 31-36
A	US 4 997 753 A (DEAN JR ROBERT C ET AL) 5 March 1991 (1991-03-05) cited in the application column 3, line 10 - column 4, line 51; claim 1 column 8, line 66 - column 9, line 60; figures 1,2	1,27, 33-36
A	column 4, line 35 - line 51	27
A	US 5 939 259 A (BURGHOFF ROBERT L ET AL) 17 August 1999 (1999-08-17) column 4, line 16 - line 40	33-36
A	US 3 224 434 A (NORMAN MOLOMUT ET AL) 21 December 1965 (1965-12-21) column 4, line 1 - line 12; figure 1 column 4, line 39 - line 43	37-40
A	column 4, line 39 - line 44	71-74
X	QUINTAVALLA J ET AL: "Fluorescently labeled mesenchymal stem cells (MSCs) maintain multilineage potential and can be detected following implantation into articular cartilage defects" BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 23, no. 1, 1 January 2002 (2002-01-01), pages 109-119, XP004322626 ISSN: 0142-9612	68-70
A	page 110, paragraph 2.2.2	41-43
X	page 113, column 2, last paragraph	71-74
A	US 6 261 596 B1 (LI LINGNA ET AL) 17 July 2001 (2001-07-17)  column 9, line 17 - line 26 column 9, line 33 - line 45	6,7,10, 14,22, 23,26
A		21
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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 045 570 A (LEMPERT TODD E ET AL) 4 April 2000 (2000-04-04) column 7, line 33 - line 37	5-7
A	US 2 465 357 A (CORRELL JOHN T) 29 March 1949 (1949-03-29) column 2, line 36 - column 3, line 32; claims 1,6	1,6,7
A	US 2002/010482 A1 (WATT PAUL W) 24 January 2002 (2002-01-24) paragraph '0013!; figures 2D,4,5	10
A	paragraph '0016! paragraph '0041!; claim 3 paragraph '0043!	5
A	US 3 815 580 A (OSTER C) 11 June 1974 (1974-06-11) column 2, line 43 - line 64; figures	1
A	US 4 098 728 A (ROSENBLATT SOLOMON) 4 July 1978 (1978-07-04) column 1, line 6 - line 36 column 3, line 59 - line 68	1-14
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A	US 4 492 305 A (AVERY CARL F) 8 January 1985 (1985-01-08) the whole document	68
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/DK 03/00855

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 8,9,11, 24,25  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-7, 10, 12-23, 26-43, 68-74
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

Continuation of Box I.2

Claims Nos.: 8,9,11, 24,25

\* Present claims 8, 9, 24 and 25 relate to a device defined (inter alia) by reference to two properties of the sponge, namely the reconfirmation, ie the rate at which a sponge regains its size, or the water absorption capacity. The claims cover all apparatuses with sponges having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such apparatuses. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the apparatus by reference to a result to be achieved. In the present case, the skilled person would consider it desirable for the sponge both to absorb as much as possible and second to regain its size as fast as possible, as it is clear from US4098728 (column 3, lines 60-68) as well as from US2001/0041913 (last two sentences of paragraph 60). As there is no hint neither in the claims nor in the description on how these desirable results are achieved, this lack of clarity is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently no search relative to the subject-matter of these claims 8-9 has been done.

The same reasoning can be applied to claims 24 and 25

No search relative to present claim 11 could be performed because part of it is missing : It stops after "pore size of about" on line 39 of page 26.

It can also be noted that:

claim 67 depending on 57 repeats matter already disclosed in claim 57.  
claim 54 depending on 44 repeats matter already disclosed in claim 44.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/DK 03/00855

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